

Serial No. 09/919,192
Amdt. Dated March 13, 2006
Reply to Office Action of December 29, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A remote reconfiguration computer system, comprising:

a storage management host installed in a client data storage system, wherein the client data storage system includes a data storage subsystem having a first configuration and comprising at least one master storage unit for storing data and providing access to the stored data and one host linked to the master storage unit, and further wherein the storage management host is communicatively linked to and adapted to provide remote access to the master storage unit and the host; and

a reconfiguration center communicatively linked to the storage management host, the reconfiguration center being located remote to the client data storage system and configured for receiving a reconfiguration request for the client data storage system from the client data storage system and for, in response to the received reconfiguration request, transferring a logical implementation of a second configuration to the client data storage system via the storage management host, wherein the client data storage system is operable to process the logical implementation to configure the data storage subsystem in the second configuration, wherein the logical implementation is selected or created based on the reconfiguration request and the first configuration.

Claim 2 (original): The computer system of claim 1, wherein the storage management host is a terminal server configured to provide Ethernet connection to a local area network (LAN) connected to the host and the master storage unit.

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Claim 3 (original): The computer system of claim 2, wherein the storage management host is further configured to provide serial connection with the master storage unit.

Claim 4 (original): The computer system of claim 1, further including a second data storage subsystem having at least one master storage unit and at least one host linked to the master storage unit and wherein the master storage unit of the second data storage subsystem is a different type of data storage device than the master storage unit of the other data storage subsystem.

Claim 5 (original): The computer system of claim 1, wherein the transferred logical implementation includes executables that affect a change in the first configuration selected from the group consisting of a logical unit number (LUN) size change, cache blocking, establishing hot standby, changing RAID, logically moving the master storage unit or a portion thereof, mainframe device type changing, adding channels, and increasing performance.

Claim 6 (original): The computer system of claim 1, wherein the reconfiguration center includes a modem and the client data storage system includes a dialback modem, wherein the dialback modem is adapted to respond to a connection initiated from the modem by requesting entry of a password, to verify an entered password, to upon verification of the password disconnect the connection and initiate a connection to the modem.

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Claim 7 (currently amended): A method for remotely reconfiguring a data storage system, comprising:

installing a storage management host within a client data storage system and communicatively linking the storage management host to a remotely-located reconfiguration system and to a master storage unit in the client data storage system;

monitoring the client data storage system;

based on the monitoring, transmitting from the remotely-located reconfiguration system a recommended reconfiguration for the master storage unit to the client data storage system;

at the remotely-located reconfiguration system, receiving a reconfiguration request for the client data storage system from the client data storage system;

in response to the receiving of the reconfiguration request, determining a first configuration of the master storage unit with the remotely-located reconfiguration system;

transferring from the remotely-located reconfiguration system a logical implementation of a data storage system configuration to the storage management host, the logical implementation being generated based on the reconfiguration request, the first configuration, and results of the monitoring; and

executing the logical implementation to reconfigure the master storage unit from the first configuration to a second configuration.

Claim 8 (canceled)

Claim 9 (previously presented): The method of claim 7, further including identifying a predetermined level of reconfiguration services from a plurality of service level options and creating the logical implementation based on the identified level of reconfiguration services.

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Claim 10 (original): The method of claim 9, wherein the service level options comprises services selected from the group consisting of changing logical unit number (LUN) size, cache blocking, establishing hot standby, changing RAID, logically moving the master storage unit or a portion thereof, changing mainframe device type, adding channels, increasing performance, and providing ongoing configuration monitoring.

Claim 11 (original): The method of claim 7, further including remotely verifying and testing the second configuration.

Claims 12-16 (canceled)

Claim 17 (currently amended): A method for remotely reconfiguring a data storage system, comprising:

- Installing a storage management host within a client data storage system, the client data storage system having a first configuration;

- communicatively linking the storage management host to a remotely-located reconfiguration system and to a master storage unit in the client data storage system;

- receiving a reconfiguration request for the client data storage system from the client data storage system at the remotely-located reconfiguration system;

- determining with the remotely-located reconfiguration system a first configuration of the client data storage system including the master storage unit;

- identifying a level of reconfiguration services from a plurality of service level options for the client data storage system;

- defining a logical implementation for the client data storage system based on the identified level of reconfiguration services and the first configuration;

- transferring from the remotely-located reconfiguration system a logical implementation of a data storage system configuration to the storage management host; and

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executing the logical implementation to reconfigure the master storage unit from a first to a second configuration.

Claim 18 (previously presented): The method of claim 17, wherein the service level options comprise services selected from the group consisting of changing logical unit number (LUN) size, cache blocking, establishing hot standby, changing RAID, logically moving the master storage unit or a portion thereof, changing mainframe device type, adding channels, increasing performance, and providing ongoing configuration monitoring.

Claim 19 (previously presented): The method of claim 17, further including remotely verifying and testing the second configuration.

Claim 20 (previously presented): The method of claim 17, further including prior to the receiving the reconfiguration request, monitoring the client data storage system and based on the monitoring, issuing a recommended reconfiguration for the client data storage system.